

High-Reliability Power Inductors ML528PJB



- High temperature materials allow operation in ambient temperatures up to 155°C.
- Special construction allows it to pass vibration testing to 30 G and shock testing to 100 G.

Core material Ferrite

Terminations Matte tin over nickel over silver.

Weight 0.82 – 1.25 g

Ambient temperature –55°C to +105°C with Irms current

Maximum part temperature +155°C (ambient + temp rise)

Storage temperature Component: –55°C to +155°C.

Tape and reel packaging: –55°C to +80°C

Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Enhanced crush-resistant packaging 350/7" reel

Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 3.68 mm pocket depth

Recommended pick and place nozzle OD: 6.2 mm; ID: ≤ 3.1 mm

Part number ¹	Inductance ² ± 20% (µH)	DCR (Ohms)		SRF typ (MHz)	Isat (A) ³			Irms (A) ⁴	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
ML528PJB682MR_	6.8	0.059	0.075	63	3.6	3.9	4.0	1.80	2.40
ML528PJB103MR_	10	0.073	0.090	49	2.8	3.2	3.3	1.55	2.15
ML528PJB153MR_	15	0.092	0.110	23	2.5	2.7	2.7	1.35	1.85
ML528PJB223MR_	22	0.102	0.130	21	2.0	2.3	2.4	1.25	1.75
ML528PJB333MR_	33	0.121	0.145	12	1.8	2.0	2.1	1.20	1.60
ML528PJB473MR_	47	0.153	0.179	10	1.6	1.7	1.8	1.10	1.50
ML528PJB683MR_	68	0.193	0.223	8.7	1.2	1.3	1.4	0.95	1.35
ML528PJB104MR_	100	0.297	0.342	6.5	1.0	1.1	1.1	0.78	1.10
ML528PJB154MR_	150	0.379	0.442	5.0	0.88	0.93	0.95	0.70	0.95
ML528PJB224MR_	220	0.564	0.662	4.3	0.70	0.74	0.77	0.60	0.82
ML528PJB334MR_	330	0.834	0.950	3.0	0.52	0.58	0.61	0.48	0.65
ML528PJB474MR_	470	1.28	1.45	2.5	0.43	0.48	0.50	0.39	0.53
ML528PJB684MR_	680	1.88	2.23	2.2	0.33	0.39	0.43	0.32	0.44
ML528PJB105MR_	1000	2.92	3.22	1.3	0.31	0.34	0.36	0.23	0.32

1. When ordering, please specify **testing** code:

ML528PJB105MRZ

Testing:

- Z** = Unscreened
- H** = Group A screening per Coilcraft CP-SA-10001
- N** = Group A screening per Coilcraft CP-SA-10004
- J** = Group A screening per Coilcraft CP-SA-10006
- T** = Screening per MIL-STD-981
- U** = Screening per EEE-INST-002
- F** = Screening per ESCC 3201

All screening performed to the document's latest revision

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DC current at 25°C that causes the specified inductance drop from its value without current.

4. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

5. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

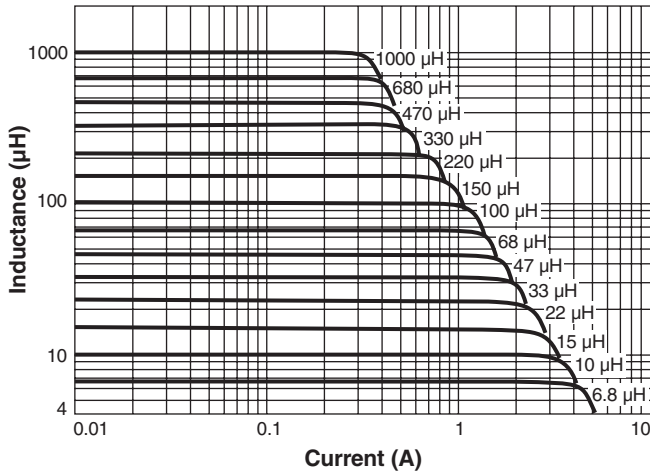
Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document ML968-1 Revised 03/03/17

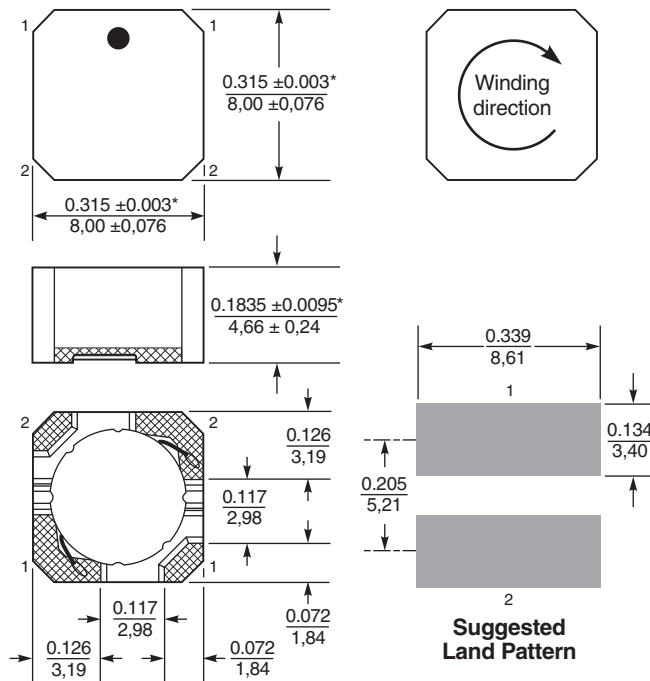
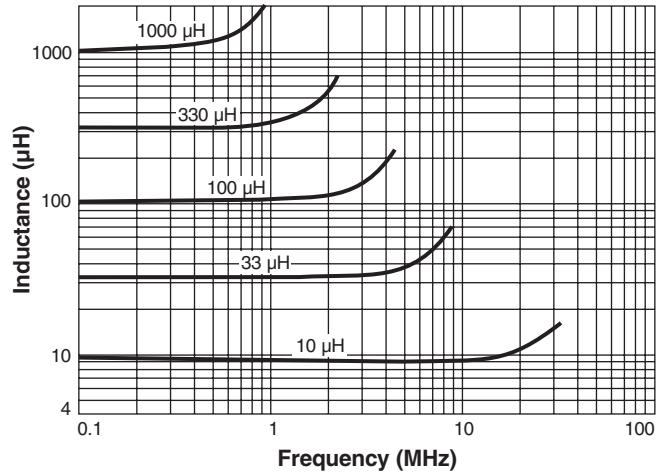
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

ML528PJB Series (8045)

L vs Current



Typical L vs Frequency



* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0.13 mm.

Dimensions are in $\frac{\text{inches}}{\text{mm}}$



1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document ML968-2 Revised 03/03/17

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.